

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS & INTERFERENCES**

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Filing Date:	May 22, 2001	Examiner:	Borissov, Igor N.
Applicant(s):	JARMAN et al.	Atty. Docket:	78104073/JE/N16035
Title:	<b>UTILITY METERING SYSTEM INCORPORATING A TRANSACTION AUTHORISATION SYSTEM</b>		

**APPELLANT'S REPLY BRIEF  
(37 CFR §41.41)**

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In accordance with 37 CFR §41.41(a)(1), this Reply Brief is filed within two months of the November 17, 2010 date of the Examiner's Answer.

I certify that this paper is being electronically submitted to the U.S. Patent and Trademark Office via the EFS-Web electronic filing system on the following date:

10 January 2011

Date of Electronic Submission

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Signature

### **Remarks**

Since the Examiner's Answer largely restates the rejections of the April 6, 2010 Final Office Action, and these rejections have already been addressed in the September 7, 2010 Appeal Brief, the following remarks will only address new points raised in the Examiner's Answer.

#### **1. Rejection of Claim 45 Under 35 USC §101**

Pages 4-5 of the Examiner's Answer supplemented the §101 rejection of claim 45 with the following comments:

Claim 45 recites:

A method of processing credit/charge card payments including the steps of:

- a. receiving a funds transfer authorization identifying a credit/charge card to be charged, the funds transfer authorization:
  - (1) including data uniquely identifying a location at which a utility meter is installed, and
  - (2) being unrelated to any measurements made by the utility meter;
- b. accepting the data uniquely identifying the location as verifying that the credit/charge card is physically present at the location, and
- c. processing the funds transfer authorization as a card present type transaction.

Factors weighing against patent eligibility under 35 U.S.C. 101:

There is no recitation of a machine or transformation.

The "receiving", "accepting" and "processing" steps could be understood as merely oral communication (for example, over a telephone line) between a customer and a service representative regarding payment for services rendered.

The claim as a whole is a mere statement of a general concept of data exchange.

Accordingly, claim 45 is not tied to a particular machine or apparatus nor does it transform a particular article into a different state or thing, thereby failing the machine-or-transformation test, and, therefore, claim 45 is non-statutory under § 101.

However, as recently made clear by the Supreme Court in *Bilski v. Kappos*, 130 S. Ct. 3218, 3225, 95 USPQ2d 1001 (2010), there are "three specific exceptions to §101's broad patent-eligibility principles: 'laws of nature, physical phenomena, and abstract ideas'"(quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 309, 206 USPQ 193, 197 (1980)). As the Supreme Court noted, while the machine-or-transformation test is "a useful and important clue" to determining whether a claimed process falls within these specific exceptions, it is not the sole test for determining the patent

eligibility of process claims. *Bilski*, 130 S. Ct. at 3226-27, 95 USPQ2d at 1007.<sup>1</sup> In this vein, the Federal Circuit has very recently cautioned that §101 ineligibility for “abstractness” should only be found where “abstractness” is “manifestly exhibited.” See *Research Corporation Technologies Inc. v. Microsoft Corp.*, \_\_\_ USPQ2d \_\_\_ (Fed. Cir. No. 2010-1037, December 8, 2010), a case wherein the lower court found that the claims in issue did not meet the machine-or-transformation test. The Federal Circuit reversed this finding, finding the claims to be statutory subject matter and essentially disregarding the results of the machine-or-transformation test. In doing so, the Federal Circuit summarized the state of §101 jurisprudence as follows:

The Supreme Court has articulated only three exceptions to the Patent Act’s broad patent-eligibility principles: “laws of nature, physical phenomena, and abstract ideas.” *Chakrabarty*, 447 U.S. at 309. . . . The section 101 patent-eligibility inquiry is only a threshold test. See *Bilski*, 130 S. Ct. at 3225. Moreover, the statutory provision that approves the broad categories of subject matter, section 101, itself directs primary attention to “the conditions and requirements of [Title 35].” 35 U.S.C. § 101. Indeed, the Supreme Court recently emphasized this statutory framework and faulted this court’s “machine or transformation” test for eligibility as nonstatutory. *Bilski*, 130 S. Ct. at 3227. In refocusing the eligibility inquiry on the statute, the Supreme Court advised that section 101 eligibility should not become a substitute for a patentability analysis related to prior art, adequate disclosure, or the other conditions and requirements of Title 35. In other words, section 101 does not permit a court to reject subject matter categorically because it finds that a claim is not worthy of a patent.

*Id.* at P. 13. The Federal Circuit, recognizing that the Supreme Court did not explicitly define abstractness, then stated that “this court also will not presume to define ‘abstract’ beyond the recognition that this disqualifying characteristic should exhibit itself so manifestly as to override the broad statutory categories of eligible subject matter and the statutory context that directs primary attention on the patentability criteria of the rest of the Patent Act.”

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<sup>1</sup> See also Associate Commissioner Robert W. Bahr’s directives to the Patent Examining Corps regarding the USPTO’s updated subject matter eligibility guidelines, available at [http://www.uspto.gov/patents/law/exam/bilski\\_guidance\\_27jul2010.pdf](http://www.uspto.gov/patents/law/exam/bilski_guidance_27jul2010.pdf), which explicitly notes in Associate Commissioner Bahr’s cover letter that some matter can fail the machine-or-transformation test and still be patent-eligible, and conversely other matter can meet the test and yet be patent-ineligible.

Following this reasoning, if we focus on the “three exceptions” identified by the Supreme Court and Federal Circuit, it is clear that claim 45 is not drawn to an unpatentable law of nature or mathematical formula. This leaves the question of whether the recited invention is an unpatentable “abstract idea.” The rejection of claim 45 dismisses the recited process as a “mere statement of a general concept of data exchange,” but this statement is conclusory, and does not explain why the claimed process – which recites a specific concept of verifying the authenticity of a credit/charge card transaction, as might be performed by a credit/charge clearinghouse or the like – is truly “abstract.” In claim 45, a specific set of data (a credit/charge funds transfer authorization) is coupled with data relating to a specific device (utility meter location data); the utility meter location data is treated as identifying the location of a credit/charge card; the meter location is taken as verification that the card is present at the meter location; and the funds transfer authorization is processed as a card-present authorization. Stated simply, when a clearinghouse (or other party) processes a credit/charge card purchase, it obtains the location of a nearby utility meter, and treats it as the location where the card is present. The recited process is quite specific, is not “manifestly abstract,” and the rejection does not include a reasoned statement as to why the recited process is truly “abstract.” Under these circumstances, where the claim is not “manifestly abstract,” *Research Corporation Technologies* dictates that the §101 rejection should be withdrawn.

**2. Rejection of Claims 1-12, 14-21, 23, 28, 37-39, 41-43, and 45-47 under 35 USC §103(a) in view of U.S. Patent 5,959,549 to Synesiou et al., U.S. Patent 5,146,067 to Sloan et al., and U.S. Patent 6,282,522 to Davis; Rejection of Claims 13, 24-26, and 48 under 35 USC §103(a) further in view of WO 00/58922 to Bos**

These rejections are both factually and legally erroneous for the reasons set forth in the Appeal Brief, and also for the following reasons.

It is understood from Pp. 15-16 of the Examiner's Answer that the Examiner regards the entirety of *Synesiou et al.*'s communal metering controller 34 (see FIG. 2) – including both the remote measurement module 38 (which Applicants regard as being the utility meter) and the controller 40 – as being the claimed utility meter. Even if this broader interpretation is used, the Answer is incorrect to state that:

controller 34 is configured to . . . transmit a credit/charge card charge request to a financial institution based on the card charge authorization (C. 5, L. 52-57) and meter location identifier (the utility meter unique identification number and module address code is stored in microcontroller 68, which allows the consumption data derived from a particular consumer site to be related to that site and to the credit data corresponding to that site) (C. 4, L. 49-53).

*Synesiou et al.* does not in fact transmit any charge requests based on the meter location identifier.<sup>2</sup>

The Answer mistakenly confuses the utility meter ID stored in the microcontroller 68 of *Synesiou et al.*'s remote measurement module 38 with the "secret code or PIN" noted at column 5 lines 52-57, which is entered at the remote display unit 73 (i.e., the user interface). As noted at column 5 lines 50-57, when a user makes a charge request in the *Synesiou et al.* system, the user enters a "secret code or PIN," a credit card number, and an amount to be paid at the remote display unit (user interface) 73, which is then transmitted to the controller 40 of the communal metering controller 34,

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<sup>2</sup> Or dependent on, including, or encoding the meter location identifier, as recited in the independent claims other than claim 1.

and in turn to the master control center 22 (i.e., the utility payment office). However, the utility meter ID stored in the microcontroller 68 is never transmitted farther than the controller 40.<sup>3</sup> The "secret code or PIN" transmitted to the utility payment office / master control center 22 is in the nature of a customer ID or account number, not a meter location identifier, since a user can make a payment from anywhere using the "secret code or PIN," and the "secret code or PIN" will merely identify the account to be paid; it will not identify the location of a nearby meter.

More critically, the rejections are legally erroneous. At pages 7-16, the Answer repeatedly asserts obviousness on the basis that:

the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

However, as noted in the Appeal Brief, there are features of the claimed combination which are not present in *Synesiou et al.* or in the other references, and which have functions that are not present in the prior art references. In particular, no art of record shows use of utility meter data to function as an indicator of card location/presence, and no art of record shows non-utility transactions wherein the transaction data transmitted to a financial institution includes, encodes, or is dependent on a meter ID, in particular where the meter ID is used to verify card presence (e.g., is used in combination with card-presence data such as a CVV code). This concept is neither disclosed in, nor

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<sup>3</sup> Referring to column 4 lines 4 onward, particularly lines 33-49, the controller 68 (FIG. 3) of the meter / remote measurement module 38 stores a variety of data (column 4 lines 33-53), including "a unique identification number and a module address code, allowing the consumption data derived from a particular consumer site to be related to that site and to the credit data corresponding thereto" (column 4 lines 49-53). The controller 40 (FIG. 2) of the substation / CMC 34 then compares the consumption data and meter ID for each of its meters / modules 38 versus each meter / module 38's credit, and when the credit stored by the substation / CMC 34 is exhausted, the substation / CMC 34 signals the controller 68 (FIG. 3) of the meter / module 38 to cut the power (column 4 lines 54-67).

obvious in view of the cited references, and reflects a significant innovation in methods for deterring credit/charge card fraud.

In addition, even if it is assumed for the sake of argument that the claimed invention “is merely a combination of old elements,” the rejections still fail to explain why an ordinary artisan would have conceived or contemplated the combination, and thus fail to make a proper *prima facie* basis for obviousness. The Supreme Court emphasized in *KSR Int'l Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007) that the obviousness analysis requires one to “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue” (*Id.* at 1396), and that “[t]o facilitate review, this analysis should be made explicit” (*Id.*). Further, “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” (*Id.*, citing *In re Kahn*, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)). Here, save for the conclusory recitations that the claimed invention “is merely a combination of old elements,” there is no explanation of the “apparent reason to combine the known elements in the fashion claimed,” and more particularly, there is no explanation why an ordinary artisan truly would have contemplated the use of meter locations to deter credit/charge fraud. The rote statements of “mere combination of old elements” are stock / form paragraphs which fail to take into account the specific facts presented by the claim recitations and the cited references in issue here, and constitute the “conclusory” reasoning forbidden by *KSR*. See also *In re Ochiai*, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995), which also forbid the use of *per se* “canned rules” of obviousness, and emphasized the need for case-specific reasoning when making §103 determinations:

Per se rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board. Indeed, they have been sanctioned by the Board as well. But reliance on per se rules of obviousness is legally incorrect and must cease. Any such administrative convenience is simply inconsistent with

section 103, which, according to *Graham* and its progeny, entitles an applicant to issuance of an otherwise proper patent unless the PTO establishes that the invention as claimed in the application is obvious over cited prior art, based on the specific comparison of that prior art with claim limitations.

To summarize, *Synesiou et al.* is directed to a system for allowing purchases of prepaid quantities of electricity from a user's home. *Sloan et al.* is also directed to a prepaid electricity system wherein users buy cards loaded with electricity credits, and then redeem the cards at electricity meters to access their prepaid quantity of electricity. *Bos* is yet another system for purchasing prepaid electricity, but here the prepayment credit or "token" is purchased by, and delivered to, the user via a mobile phone. *Davis et al.* simply has a user purchase goods or services over the internet using a stored-value card read at a card reader which is associated with the user's computer. If these references are objectively reviewed in the context of the general state of the art at the time the application was filed, it simply cannot fairly be said that the reader would come to conceive the invention set forth by any of the independent claims. Remote prepayment for utilities was clearly known, as was making purchases over the internet. However, there is simply nothing that would lead a reader to contemplate the concept of a credit/charge card anti-fraud system wherein card purchase data – and in particular purchase data related to non-utility purchases – is coupled to the identity of a nearby utility meter to thereby verify the location of the card (this being the concept underlying the various claims). Further, the rejections do not set forth the required "articulated reasoning with some rational underpinning" explaining why or how an ordinary artisan would truly conceive the claimed invention in view of the cited references. Instead, the rejections reproduce *per se* "canned" reasoning, with no consideration of the specific facts in issue here, and with no consideration of whether an ordinary artisan would in reality have any "apparent reason to combine the known elements in the fashion claimed." The §103 rejections should therefore be withdrawn.



**3. In Closing**

For the reasons noted above and in the prior Appeal Brief, the Board is requested to reverse the rejections and to allow claims 1-21, 23-26, 28, 37-39, 41-43, and 45-48.

If any questions regarding the application arise, please contact the undersigned attorney. Telephone calls related to this application are welcomed and encouraged.

The Commissioner is authorized to charge any fees or credit any overpayments relating to this appeal to deposit account number 18-2055.

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